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ART UNIT	**PAPER NUMBER**
2611	

DATE MAILED: 10/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/630,673	TZANNES, MARCOS C	
	Examiner	Art Unit	
	Mohsin (Ben) Benghuzzi M.B.	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 July 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *July 31, 2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign '10' mentioned in the description.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 2-10 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lacey, III (US Pub 2003/0128669) in view of Harikumar et al. (US Pub 2003/0128752).

1) Regarding claim 2:

Lacey, III discloses a multicarrier communication system including a first multicarrier transceiver and a second multicarrier transceiver (Paragraph 14 Lines 1-4), a variable state length initialization method (Paragraph 14 Lines 11-15) comprising:

transmitting from the first multicarrier transceiver to the second multicarrier transceiver information identifying a first value that is used to determine a first minimum number of multicarrier symbols (Abstract Lines 15-18 and Paragraph 18 Lines 5-13, wherein, the handshaking component and the physical layer are the first and second multicarrier transceivers, respectively);

transmitting from the second multicarrier transceiver to the first multicarrier transceiver information identifying a second value that is used to determine a second minimum number of multicarrier symbols (Paragraph 19 Lines 1-5, wherein; number of symbols in this case is chosen to be the minimum, see Paragraph 18 Lines 10-13);

transmitting from the first multicarrier transceiver to the second multicarrier transceiver, during an initialization state, the selected number of multicarrier symbols (Paragraph 20 Lines 1-3, wherein; 'exchange messages' is interpreted as transmitting from the first multicarrier transceiver to the second multicarrier transceiver).

Lacey, III does not disclose selecting the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols.

However, Harikumar et al. discloses selecting the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols (Page 10, Claim 35 Lines 8-11).

It is desirable that, in a transceiver, the greater of two minimum numbers of multicarrier symbols be selected for transmission. Selecting and transmitting the greater of two numbers of symbols results in a transceiver with greater data throughput. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include selecting the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols, as Harikumar et al. teaches, in the variable state length initialization method of Lacey, III in order to increase transceiver throughput.

2) Regarding claim 3:

Lacey, III discloses a multicarrier transceiver, a variable state length initialization method (Paragraph 14 Lines 11-15) comprising:

transmitting to a second multicarrier transceiver information identifying a first value that is used to determine a first minimum number of multicarrier symbols (Abstract Lines 15-18 and Paragraph 18 Lines 5-13, wherein, the handshaking component and the physical layer are the first and second multicarrier transceivers, respectively);

receiving from the second multicarrier transceiver information identifying a second value that is used to determine a second minimum number of multicarrier symbols (Paragraph 19 Lines 1-5, wherein; number of symbols in this case is chosen to be the minimum, see Paragraph 18 Lines 10-13);

transmitting to the second multicarrier transceiver, during an initialization state, the selected number of multicarrier symbols (Paragraph 20 Lines 1-3, wherein; 'exchange messages' is interpreted as transmitting to the second multicarrier transceiver).

Lacey, III does not disclose selecting the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols. However, Harikumar et al. discloses selecting the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols (Page 10, Claim 35 Lines 8-11).

As discussed in claim 2 above, it is desirable that, in a transceiver, the greater of two minimum numbers of multicarrier symbols be selected for transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include selecting the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols, as Harikumar et al. teaches, in the variable state length initialization method of Lacey, III in order to increase transceiver throughput.

3) Regarding claim 4:

Lacey, III discloses a multicarrier transceiver, a variable state length initialization method (Paragraph 14 Lines 11-15) comprising:

transmitting to a second multicarrier transceiver information identifying a first value that is used to determine a first minimum number of multicarrier symbols (Abstract

Lines 15-18 and Paragraph 18 Lines 5-13, wherein, the handshaking component and the physical layer are the first and second multicarrier transceivers, respectively);

receiving from the second multicarrier transceiver information identifying a second value that is used to determine a second minimum number of multicarrier symbols (Paragraph 19 Lines 1-5, wherein; number of symbols in this case is chosen to be the minimum, see Paragraph 18 Lines 10-13);

receiving from the second multicarrier transceiver, during an initialization state, the selected number of multicarrier symbols (Paragraph 20 Lines 1-3, wherein; 'exchange messages' is interpreted as receiving from the second multicarrier transceiver).

Lacey, III does not disclose selecting a number equal to the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols. However, Harikumar et al. discloses selecting a number equal to the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols (Page 10, Claim 35 Lines 8-11).

As discussed in claim 2 above, it is desirable that, in a transceiver, the greater of two minimum numbers of multicarrier symbols be selected for transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include selecting a number equal to the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols, as Harikumar et al. teaches, in the variable state length initialization method of Lacey, III in order to increase transceiver throughput.

4) Regarding claim 5:

Lacey, III discloses a variable state length initialization multicarrier communication system (Paragraph 14 Lines 11-15), including a first multicarrier transceiver and a second multicarrier transceiver (Paragraph 14 Lines 1-4), comprising:

means for transmitting from the first multicarrier transceiver to the second multicarrier transceiver information identifying a first value that is used to determine a first minimum number of multicarrier symbols (Abstract Lines 15-18 and Paragraph 18 Lines 5-13, wherein, the handshaking component and the physical layer are interpreted as the first and second multicarrier transceivers, respectively);

means for transmitting from the second multicarrier transceiver to the first multicarrier transceiver information identifying a second value that is used to determine a second minimum number of multicarrier symbols (Paragraph 19 Lines 1-5, wherein; number of symbols in this case is chosen to be the minimum, see Paragraph 18 Lines 10-13);

means for transmitting from the first multicarrier transceiver to the second multicarrier transceiver, during an initialization state, the selected number of multicarrier symbols (Paragraph 20 Lines 1-3, wherein; 'exchange messages' is interpreted as transmitting from the first multicarrier transceiver to the second multicarrier transceiver).

Lacey, III does not teach means for selecting the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols. However, Harikumar et al. teaches means for selecting the greater of the first

minimum number of multicarrier symbols and the second minimum number of multicarrier symbols (Page 10, Claim 35 Lines 8-11).

As discussed in claim 2 above, it is desirable that, in a transceiver, the greater of two minimum numbers of multicarrier symbols be selected for transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include means for selecting the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols, as Harikumar et al. teaches, in the variable state length initialization system of Lacey, III in order to increase transceiver throughput.

5) Regarding claim 6:

Lacey, III discloses a variable state length initialization multicarrier transceiver (Paragraph 14 Lines 11-15 and Paragraph 14 Lines 1-4) comprising:

means for transmitting to a second multicarrier transceiver information identifying a first value that is used to determine a first minimum number of multicarrier symbols (Abstract Lines 15-18 and Paragraph 18 Lines 5-13, wherein, the handshaking component and the physical layer are the first and second multicarrier transceivers, respectively);

means for receiving from the second multicarrier transceiver information identifying a second value that is used to determine a second minimum number of multicarrier symbols (Paragraph 19 Lines 1-5, wherein; number of symbols in this case is chosen to be the minimum, see Paragraph 18 Lines 10-13);

means for transmitting to the second multicarrier transceiver, during an initialization state, the selected number of multicarrier symbols (Paragraph 20 Lines 1-3, wherein; 'exchange messages' is interpreted as transmitting to the second multicarrier transceiver).

Lacey, III does not teach means for selecting the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols. However, Harikumar et al. teaches means for selecting the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols (Page 10, Claim 35 Lines 8-11).

As discussed in claim 2 above, it is desirable that, in a transceiver, the greater of two minimum numbers of multicarrier symbols be selected for transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include means for selecting the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols, as Harikumar et al. teaches, in the variable state length initialization transceiver of Lacey, III in order to increase transceiver throughput.

6) Regarding claim 7:

Lacey, III discloses a variable state length initialization multicarrier transceiver (Paragraph 14 Lines 11-15 and Paragraph 14 Lines 1-4) comprising:

means for transmitting to a second multicarrier transceiver information identifying a first value that is used to determine a first minimum number of multicarrier symbols (Abstract Lines 15-18 and Paragraph 18 Lines 5-13, wherein, the handshaking

component and the physical layer are the first and second multicarrier transceivers, respectively);

means for receiving from the second multicarrier transceiver information identifying a second value that is used to determine a second minimum number of multicarrier symbols (Paragraph 19 Lines 1-5, wherein; number of symbols in this case is chosen to be the minimum, see Paragraph 18 Lines 10-13);

means for receiving from the second multicarrier transceiver, during an initialization state, the selected number of multicarrier symbols (Paragraph 20 Lines 1-3, wherein; 'exchange messages' is interpreted as receiving from the second multicarrier transceiver).

Lacey, III does not teach means for selecting a number equal to the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols. However, Harikumar et al. teaches means for selecting a number equal to the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols (Page 10, Claim 35 Lines 8-11).

As discussed in claim 2 above, it is desirable that, in a transceiver, the greater of two minimum numbers of multicarrier symbols be selected for transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include means for selecting a number equal to the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols, as Harikumar et al. teaches, in the variable state length initialization transceiver of Lacey, III in order to increase transceiver throughput.

7) Regarding claim 8:

Lacey, III discloses a variable state length initialization multicarrier communication system (Paragraph 14 Lines 11-15) comprising:

a first multicarrier transceiver designed to transmit information identifying a first value that is used to determine a first minimum number of multicarrier symbols (Abstract Lines 15-18 and Paragraph 18 Lines 5-13, wherein, the handshaking component and the physical layer are interpreted as the first and second multicarrier transceivers, respectively);

a second multicarrier transceiver designed to transmit to the first multicarrier transceiver information identifying a second value that is used to determine a second minimum number of multicarrier symbols (Paragraph 19 Lines 1-5, wherein; number of symbols in this case is chosen to be the minimum, see Paragraph 18 Lines 10-13),

to transmit to the second multicarrier transceiver, during an initialization state, the selected number of multicarrier symbols (Paragraph 20 Lines 1-3, wherein; 'exchange messages' is interpreted as to transmit to the second multicarrier transceiver).

Lacey, III does not disclose wherein the first multicarrier transceiver is designed to select the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols. However, Harikumar et al. discloses wherein the first multicarrier transceiver is designed to select the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols (Page 10, Claim 35 Lines 8-11).

As discussed in claim 2 above, it is desirable that, in a transceiver, the greater of two minimum numbers of multicarrier symbols be selected for transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the first multicarrier transceiver designed to select the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols, as Harikumar et al. teaches, in the communication system of Lacey, III in order to increase transceiver throughput.

8) Regarding claim 9:

Lacey, III discloses a variable state length initialization multicarrier transceiver (Paragraph 14 Lines 11-15 and Paragraph 14 Lines 1-4) designed to transmit to a second multicarrier transceiver information identifying a first value that is used to determine a first minimum number of multicarrier symbols (Abstract Lines 15-18 and Paragraph 18 Lines 5-13, wherein, the handshaking component and the physical layer are the first and second multicarrier transceivers, respectively),

wherein the multicarrier transceiver is also designed to receive from the second multicarrier transceiver information identifying a second value that is used to determine a second minimum number of multicarrier symbols (Paragraph 19 Lines 1-5, wherein; number of symbols in this case is chosen to be the minimum, see Paragraph 18 Lines 10-13), and to transmit to the second multicarrier transceiver, during an initialization state, the selected number of multicarrier symbols (Paragraph 20 Lines 1-3, wherein; 'exchange messages' is interpreted as transmitting to the second multicarrier transceiver).

Lacey, III does not teach to select the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols. However, Harikumar et al. teaches to select the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols (Page 10, Claim 35 Lines 8-11).

As discussed in claim 2 above, it is desirable that, in a transceiver, the greater of two minimum numbers of multicarrier symbols be selected for transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the variable state length initialization multicarrier transceiver of Lacey, III designed to select the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols, as Harikumar et al. teaches, in order to increase transceiver throughput.

9) Regarding claim 10:

Lacey, III discloses a variable state length initialization multicarrier transceiver (Paragraph 14 Lines 11-15 and Paragraph 14 Lines 1-4) designed to transmit to a second multicarrier transceiver information identifying a first value that is used to determine a first minimum number of multicarrier symbols (Abstract Lines 15-18 and Paragraph 18 Lines 5-13, wherein, the handshaking component and the physical layer are the first and second multicarrier transceivers, respectively),

wherein the multicarrier transceiver is also designed to receive from the second multicarrier transceiver information identifying a second value that is used to determine a second minimum number of multicarrier symbols (Paragraph 19 Lines 1-5, wherein;

number of symbols in this case is chosen to be the minimum, see Paragraph 18 Lines 10-13), and to receive from the second multicarrier transceiver, during an initialization state, the selected number of multicarrier symbols (Paragraph 20 Lines 1-3, wherein; 'exchange messages' is interpreted as to receive from the second multicarrier transceiver).

Lacey, III does not disclose to select the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols. However, Harikumar et al. discloses to select the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols (Page 10, Claim 35 Lines 8-11).

As discussed in claim 2 above, it is desirable that, in a transceiver, the greater of two minimum numbers of multicarrier symbols be selected for transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the variable state length initialization multicarrier transceiver of Lacey, III designed to select the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols, as Harikumar et al. teaches, in order to increase transceiver throughput.

10)Regarding claim 14:

Lacey, III discloses a multicarrier communication system including a first multicarrier transceiver and a second multicarrier transceiver (Paragraph 14 Lines 1-4), a variable state length initialization protocol (Paragraph 14 Lines 11-15) comprising:

transmitting from the first multicarrier transceiver to the second multicarrier transceiver information identifying a first value that is used to determine a first minimum number of multicarrier symbols (Abstract Lines 15-18 and Paragraph 18 Lines 5-13, wherein, the handshaking component and the physical layer are the first and second multicarrier transceivers, respectively);

transmitting from the second multicarrier transceiver to the first multicarrier transceiver information identifying a second value that is used to determine a second minimum number of multicarrier symbols (Paragraph 19 Lines 1-5, wherein; number of symbols in this case is chosen to be the minimum, see Paragraph 18 Lines 10-13);

transmitting from the first multicarrier transceiver to the second multicarrier transceiver, during an initialization state, the selected number of multicarrier symbols (Paragraph 20 Lines 1-3, wherein; 'exchange messages' is interpreted as transmitting from the first multicarrier transceiver to the second multicarrier transceiver).

Lacey, III does not disclose selecting the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols. However, Harikumar et al. discloses selecting the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols (Page 10, Claim 35 Lines 8-11).

As discussed in claim 2 above, it is desirable that, in a transceiver, the greater of two minimum numbers of multicarrier symbols be selected for transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include selecting the greater of the first minimum number of multicarrier

symbols and the second minimum number of multicarrier symbols, as Harikumar et al. teaches, in the variable state length initialization protocol of Lacey, III in order to increase transceiver throughput.

11)Regarding claim 15:

Lacey, III discloses a multicarrier transceiver, a variable state length initialization protocol (Paragraph 14 Lines 11-15) comprising:

transmitting to a second multicarrier transceiver information identifying a first value that is used to determine a first minimum number of multicarrier symbols (Abstract Lines 15-18 and Paragraph 18 Lines 5-13, wherein, the handshaking component and the physical layer are the first and second multicarrier transceivers, respectively);

receiving from the second multicarrier transceiver information identifying a second value that is used to determine a second minimum number of multicarrier symbols (Paragraph 19 Lines 1-5, wherein; number of symbols in this case is chosen to be the minimum, see Paragraph 18 Lines 10-13);

transmitting to the second multicarrier transceiver, during an initialization state, the selected number of multicarrier symbols (Paragraph 20 Lines 1-3, wherein; 'exchange messages' is interpreted as transmitting to the second multicarrier transceiver).

Lacey, III does not disclose selecting the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols. However, Harikumar et al. discloses selecting the greater of the first minimum number

of multicarrier symbols and the second minimum number of multicarrier symbols (Page 10, Claim 35 Lines 8-11).

As discussed in claim 2 above, it is desirable that, in a transceiver, the greater of two minimum numbers of multicarrier symbols be selected for transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include selecting the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols, as Harikumar et al. teaches, in the variable state length initialization protocol of Lacey, III in order to increase transceiver throughput.

12)Regarding claim 16:

Lacey, III discloses a multicarrier transceiver, a variable state length initialization protocol (Paragraph 14 Lines 11-15) comprising:

transmitting to a second multicarrier transceiver information identifying a first value that is used to determine a first minimum number of multicarrier symbols (Abstract Lines 15-18 and Paragraph 18 Lines 5-13, wherein, the handshaking component and the physical layer are the first and second multicarrier transceivers, respectively);

receiving from the second multicarrier transceiver information identifying a second value that is used to determine a second minimum number of multicarrier symbols (Paragraph 19 Lines 1-5, wherein; number of symbols in this case is chosen to be the minimum, see Paragraph 18 Lines 10-13);

receiving from the second multicarrier transceiver, during an initialization state, the selected number of multicarrier symbols (Paragraph 20 Lines 1-3, wherein;

'exchange messages' is interpreted as receiving from the second multicarrier transceiver).

Lacey, III does not disclose selecting a number equal to the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols. However, Harikumar et al. discloses selecting a number equal to the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols (Page 10, Claim 35 Lines 8-11).

As discussed in claim 2 above, it is desirable that, in a transceiver, the greater of two minimum numbers of multicarrier symbols be selected for transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include selecting a number equal to the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols, as Harikumar et al. teaches, in the variable state length initialization protocol of Lacey, III in order to increase transceiver throughput.

4. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lacey, III (US Pub 2003/0128669) and Harikumar et al. (US Pub 2003/0128752), and further in view of Bender et al. (US Pub 2002/0126744).

1) Regarding claim 11:

Lacey, III discloses information for variable state length initialization in a multicarrier communication system (Paragraph 14 Lines 11-15, Paragraph 14 Lines 1-4, and Paragraph 21 Lines 1-3) comprising:

information that transmits from a first multicarrier transceiver to a second multicarrier transceiver information identifying a first value that is used to determine a first minimum number of multicarrier symbols (Abstract Lines 15-18 and Paragraph 18 Lines 5-13, wherein, the handshaking component and the physical layer are interpreted as the first and second multicarrier transceivers, respectively);

information that transmits from the second multicarrier transceiver to the first multicarrier transceiver information identifying a second value that is used to determine a second minimum number of multicarrier symbols (Paragraph 19 Lines 1-5, wherein; number of symbols in this case is chosen to be the minimum, see Paragraph 18 Lines 10-13);

information that transmits from the first multicarrier transceiver to the second multicarrier transceiver, during an initialization state, the selected number of multicarrier symbols (Paragraph 20 Lines 1-3, wherein; 'exchange messages' is interpreted as transmitting from the first multicarrier transceiver to the second multicarrier transceiver).

Lacey, III does not disclose information that selects the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols. However, Harikumar et al. discloses information that selects the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols (Page 10, Claim 35 Lines 8-11).

As discussed in claim 2 above, it is desirable that, in a transceiver, the greater of two minimum numbers of multicarrier symbols be selected for transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to include information for the variable state length initialization system of Lacey, III that selects the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols, as Harikumar et al. teaches, in order to increase transceiver throughput.

Furthermore, Lacey, III and Harikumar et al. do not disclose an information storage media having recorded thereon information for variable state length initialization in a multicarrier communication system. However, Bender et al. discloses an information storage media having recorded thereon information for variable state length initialization in a multicarrier communication system (Paragraph 40 Lines 22-25).

It is desirable that information for variable state length initialization in a multicarrier communication system be recorded and stored on an information storage media. Storing information on a storage media prevents from having to reproduce the information each time the variable state length initialization multicarrier communication system is to operate. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an information storage media, as Bender et al. discloses, having recorded thereon the information for the variable state length initialization multicarrier communication system of Lacey, III and Harikumar et al. in order to prevent from having to continually reproduce the necessary information.

2) Regarding claim 12:

Lacey, III discloses information for variable state length initialization in a multicarrier transceiver (Paragraph 14 Lines 11-15, Paragraph 14 Lines 1-4, and Paragraph 21 Lines 1-3) comprising:

information that transmits to a second multicarrier transceiver information identifying a first value that is used to determine a first minimum number of multicarrier symbols (Abstract Lines 15-18 and Paragraph 18 Lines 5-13, wherein, the handshaking component and the physical layer are the first and second multicarrier transceivers, respectively);

information that receives from the second multicarrier transceiver information identifying a second value that is used to determine a second minimum number of multicarrier symbols (Paragraph 19 Lines 1-5, wherein; number of symbols in this case is chosen to be the minimum, see Paragraph 18 Lines 10-13);

information that transmits to the second multicarrier transceiver, during an initialization state, the selected number of multicarrier symbols (Paragraph 20 Lines 1-3, wherein; 'exchange messages' is interpreted as transmitting to the second multicarrier transceiver).

Lacey, III does not disclose information that selects the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols. However, Harikumar et al. discloses information that selects the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols (Page 10, Claim 35 Lines 8-11).

As discussed in claim 2 above, it is desirable that, in a transceiver, the greater of two minimum numbers of multicarrier symbols be selected for transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include information for the variable state length initialization system of

Lacey, III that selects the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols, as Harikumar et al. teaches, in order to increase transceiver throughput.

Furthermore, Lacey, III and Harikumar et al. do not disclose an information storage media having recorded thereon information for variable state length initialization in a multicarrier transceiver. However, Bender et al. disclose an information storage media having recorded thereon information for variable state length initialization in a multicarrier transceiver (Paragraph 40 Lines 22-25).

As discussed in claim 11 above, it is desirable that information for variable state length initialization in a multicarrier transceiver be recorded and stored on an information storage media. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an information storage media, as Bender et al. discloses, having recorded thereon the information for the variable state length initialization multicarrier transceiver of Lacey, III and Harikumar et al. in order to prevent from having to continually reproduce the necessary information.

3) Regarding claim 13:

Lacey, III discloses information for variable state length initialization in a multicarrier transceiver (Paragraph 14 Lines 11-15, Paragraph 14 Lines 1-4, and Paragraph 21 Lines 1-3) comprising:

information that transmits to a second multicarrier transceiver information identifying a first value that is used to determine a first minimum number of multicarrier symbols (Abstract Lines 15-18 and Paragraph 18 Lines 5-13, wherein, the handshaking

component and the physical layer are the first and second multicarrier transceivers, respectively);

information that receives from the second multicarrier transceiver information identifying a second value that is used to determine a second minimum number of multicarrier symbols (Paragraph 19 Lines 1-5, wherein; number of symbols in this case is chosen to be the minimum, see Paragraph 18 Lines 10-13);

information that receives from the second multicarrier transceiver, during an initialization state, the selected number of multicarrier symbols (Paragraph 20 Lines 1-3, wherein; 'exchange messages' is interpreted as receiving from the second multicarrier transceiver).

Lacey, III does not disclose information that selects a number equal to the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols. However, Harikumar et al. discloses information that selects a number equal to the greater of the first minimum number of multicarrier symbols and the second minimum number of multicarrier symbols (Page 10, Claim 35 Lines 8-11).

As discussed in claim 2 above, it is desirable that, in a transceiver, the greater of two minimum numbers of multicarrier symbols be selected for transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include information for the variable state length initialization transceiver of Lacey, III that selects a number equal to the greater of the first minimum number of

multicarrier symbols and the second minimum number of multicarrier symbols, as Harikumar et al. teaches, in order to increase transceiver throughput.

Furthermore, Lacey, III and Harikumar et al. do not disclose an information storage media having recorded thereon information for variable state length initialization in a multicarrier transceiver. However, Bender et al. disclose an information storage media having recorded thereon information for variable state length initialization in a multicarrier transceiver (Paragraph 40 Lines 22-25).

As discussed in claim 11 above, it is desirable that information for variable state length initialization in a multicarrier transceiver be recorded and stored on an information storage media. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an information storage media, as Bender et al. discloses, having recorded thereon information for the variable state length initialization multicarrier transceiver of Lacey, III and Harikumar et al. in order to prevent from having to continually reproduce the necessary information.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McFarland (US Pub 2002/0006167) discloses a multi-carrier communication system utilizing an OFDM or DMT that allows for dynamically changing receive and transmit symbol rates and number of carriers. Yong (US Pub 2001/0030998) discloses a system and method that generates rate options for ADSL transceivers.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohsin (Ben) Benghuzzi whose telephone number is (571) 270-1075. The examiner can normally be reached Monday through Friday, 8:30am- 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mohsin (Ben) Benghuzzi

October 19, 2006

MOHAMMED GHAYOUR
SUPERVISORY PATENT EXAMINER